

Low Carb Diets for Horses?

There is no doubt that low carbohydrate diets can be effective for weight loss in people. But is there any benefit to the use of low carbohydrate diets in horses? The answer is yes, for some horses.

Which horses would benefit from the use of a low carbohydrate diet? A low carbohydrate diet is critical for horses that suffer from laminitis or have had a previous bout of the disease. Obese horses, horses that tie-up, horses with Cushings disease, and horses affected by equine metabolic syndrome (insulin resistance) can all benefit from decreased levels of carbohydrates in their diet.

What is equine metabolic syndrome? Equine metabolic syndrome is condition where the rate of removal of glucose from the circulation is decreased due to inhibition of the action of insulin by fat cells. While the hormonal actions and interactions are very complicated, the bottom line is that obese horses can lose the ability to lower their blood sugar, putting them at risk for developing laminitis.

How can a horse's intake of carbohydrate be decreased? Grain products contain high levels of carbohydrates, so the first step to a low carbohydrate diet is to remove grain from the diet.

Low carbohydrate feed supplements are available to balance a horses diet. LMF Low-Carb Stage 1 and Low-Carb Complete are two examples of low carbohydrate feed supplements.

Roughage is an important source of carbohydrates in a horse's diet. Levels in hay can vary greatly depending on the soil where the hay was grown and climate conditions immediately before and at the time of harvest. Testing is the only way to get an accurate measure of carbohydrate levels in hay. This can be impractical for horse owners that buy multiple loads of hay throughout the year. The good news is that soaking hay in water for 30-60 minutes before feeding can significantly decrease the level of carbohydrates and is a good method to insure low carbohydrate hay without the expense and inconvenience of testing.

As for pasture, it is safest not to allow a laminitic horse access to pasture. Owners of horses at risk for laminitis (obese horses, Cushingoid horses) should limit access to pasture especially when the grass is stressed, resulting in elevated carbohydrate levels. Stress factors for grass include drought, low levels of nutrients in the soil, overgrazing or allowing the grass to get overly long, freezing temperatures, and warm days followed by cold nights. Grazing muzzles are helpful for decreasing the volume of hay a horse can consume during its turnout period.

For more information on equine metabolic syndrome and low carbohydrate diets in horses we invite you to attend Dr. Jody Hicks' seminar *Application of Low Carbohydrate Diets in Horses* on Tuesday, April 5.

State of the Art Radiology

We are pleased to announce the addition of computed radiography (CR) to our imaging modalities here at Comstock Large Animal Hospital. The advantages of the CR system are superior image quality, improved diagnostic capability, and more rapid acquisition and interpretation of radiographs.

Dr. Becky Frankeny will be demonstrating the new system during her seminar *The Prepurchase Exam; What Are You Paying For?* on Tuesday April 19.

West Nile Virus

As most of you know, West Nile Virus hit Nevada for the first time last summer. In the period from July 1 to December 28, eighty-six confirmed cases of equine WNV were identified in the state. As mosquitoes that harbor the virus can hibernate over the winter, we can be sure the disease will strike again this year. To ensure maximum protection from the disease, all horses should receive their WNV booster before the onset of mosquito season. If your horse has not been previously vaccinated against WNV, the first vaccine should be given at least six weeks before the beginning of mosquito season, with a booster give 3-6 weeks after the primary vaccine.

For more information on protecting your horse against WNV, please attend Dr. Alex Turner's seminar *Everything You Wanted To Know About West Nile Virus* on Tuesday, March 8.